

Sect. 2.6B

Sketch a graph for each problem by hand.

$$\textcircled{1} f(x) = \frac{3}{x-2}$$

$$\textcircled{2} f(x) = \frac{2x-1}{x}$$

$$\textcircled{3} f(x) = \frac{x}{x^2-x-2}$$

$$\textcircled{4} f(x) = \frac{x^2-9}{x^2-2x-3}$$

Guidelines for Graphingstep

- ① Simplify $f(x)$ if possible
- ② Plug 0 in for x to find y -int
- ③ set the numerator equal to 0 and solve for x . This gives x -int.
- ④ set the denominator equal to 0 and solve for x . This give vertical asymptotes and domain restrictions
- ⑤ Use the 3 rules, p. 144 to find horizontal asymptotes.
- ⑥ Plot points to get shape of graph.

Homework

- Sect. 2.6 #31-35
- Sect. 2.7 Read and understand the section and examples.
(slant Asymptotes)